

ABSTRACT

This invention refers to a method for obtaining plants by genetic engineering techniques, with improved capacity to synthesize, to accumulate and to exude organic acids. More specifically it refers to the production of transgenic plants having an improved capacity to take up and excrete organic acids, providing them with a better uptake capacity of nutrients naturally present in the soil or added as fertilizers to the soil. These plants also have an increased capacity to tolerate the presence in the soil of certain toxic compounds such as aluminum. The transformation method implies the introduction of genes that increase the capacity of the plant to produce organic acids and involves the following steps: a) preparation of a recombinant molecule comprising the coding sequence for an enzyme that produces organic acids, functionally bound to a promoter sequence active in plant cells and a transcription terminator functional in plant cells, b) transformation of plant cells with said recombinant molecule, c) the regeneration of transgenic plants from the transformed cells.